

**AMENDMENTS TO THE CLAIMS**

6/2/06  
This listing of claims will replace all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (currently amended): A method for measuring a halogen concentration comprising introducing a gas containing a halogen gas into a metal iodide-containing solution to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution at a specific wavelength ranging from 460 nm to 520 nm, and calculating the halogen concentration in the gas from the quantity of iodine liberated.

2. (currently amended): ~~The~~A method for measuring a halogen concentration according to claim 1, wherein the metal iodide-containing solution contains starch comprising introducing a gas containing a halogen gas into metal iodide-containing solution which further contains starch to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution at a specific wavelength, and calculating the halogen concentration in the gas from the quantity of iodine liberated.

3. (canceled).

3 A. (original): The method for measuring a halogen concentration according to claim 2, wherein the specific wavelength ranges from 580 nm to 780 nm.

~~4~~ ~~5.~~ (currently amended): The method for measuring a halogen concentration according to claim ~~31~~ or ~~4~~<sup>3</sup>, wherein the visible light is a laser beam.

~~5~~ ~~6.~~ (original): The method for measuring a halogen concentration according to claim 1 or 2, wherein the halogen gas is chlorine gas or fluorine gas.

~~6~~ ~~7.~~ (currently amended): A method for continuously measuring a halogen concentration, comprising introducing continuously a gas containing a halogen gas into a continuously flowing metal iodide-containing solution to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution at a specific wavelength ranging from 460 nm to 520 nm, and calculating the halogen concentration in the gas from the quantity of iodine liberated.

~~7~~ ~~8.~~ (currently amended): ~~The~~A method for continuously measuring a halogen concentration ~~according to claim 7, wherein the metal iodide-containing solution contains starch~~ comprising introducing continuously a gas containing a halogen gas into a continuously flowing metal iodide-containing solution which further contains starch to liberate iodine, determining quantitatively the liberated iodine by measuring a visible light transmittance of the solution concentration in the gas from the quantity of iodine liberated.

9. (canceled).

~~8~~ <sup>10</sup> 10. (original): The method for continuously measuring a halogen concentration according to claim ~~8~~<sup>7</sup>, wherein the specific wavelength ranges from 580 nm to 780 nm.

~~9~~ <sup>11</sup> 11. (currently amended): The method for continuously measuring a halogen concentration according to claim ~~9~~<sup>7</sup> or ~~10~~<sup>8</sup>, wherein the visible light is a laser beam.

~~10~~ <sup>12</sup> 12. (original): The method for continuously measuring a halogen concentration according to claim ~~7~~<sup>6</sup> or ~~8~~<sup>7</sup>, wherein the halogen gas is chlorine gas or fluorine gas.

Claims 13-38. (canceled).